

Putting Evidence into Practice



The OBSSR Report of the
Working Group on the Integration
of Effective Behavioral Treatments
into Clinical Care

Office of Behavioral and Social Sciences Research
National Institutes of Health

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*This report is dedicated to the
memory of the late
Dr. Richard Friedman,
the original chair of the working group.*

Foreword

The Working Group on the Integration of Effective Behavioral Treatments into Clinical Care was convened in 1997 to address a critical issue: the lack of integration of evidence-based behavioral approaches into health care. Behavior mediates almost every aspect of health and health care. Whether we focus on risk behaviors of individuals or the appropriate use of the latest biomedical technology, attention to behavior will lead to better outcomes. To date, however, what is known about behavior is rarely incorporated into the planning and delivery of medical care. What barriers have prevented this from occurring? What must happen to ensure widespread integration of evidence-based practices and interventions within health care nationwide? What is the role of the behavioral science and practice communities in facilitating integration? This report reflects the deliberations of the working group as it addressed these questions.

The recommendations presented are relevant to six audiences, each of which has a critical role in advancing the use of evidence-based behavioral approaches in health care:

Professional societies will benefit from the recommendations that clearly identify ways to build the capacity of their members to conduct relevant intervention research and increase delivery of effective services.

Researchers will find interesting new lines of research that would advance evidence-based practice.

Clinicians who deliver behavioral services will see the important role they have in communicating the value of behavioral approaches and in shaping intervention research to improve its real-world relevance.

Academic faculty will see new research and training directions for students.

Entrepreneurs will see new opportunities for the development of products that will facilitate the use of evidence-based behavioral approaches in health care.

Funders will find the recommendations useful for shaping grant initiatives that will significantly advance the integration of health and behavior research, thereby leading to improved health outcomes.

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Introduction

Nearly half the nation's premature deaths from the ten leading causes of mortality are attributable to behavioral factors. Behavioral health risks — unhealthy diet; lack of exercise; tobacco, alcohol, and drug abuse; risky sexual practices; and others are associated also with higher ambulatory care and hospitalization costs and account for almost three-quarters of all medical care spending.

Despite abundant evidence showing these risks to be major contributors to chronic disease, injury, disability, premature death, and escalating health care costs, behavioral interventions and treatments have largely been overlooked as cost-effective ways to identify and change health-related behaviors. Why have evidence-based behavioral interventions had such limited penetration in health care settings and what can be done to facilitate their integration into clinical care?

In 1997, at the National Institutes of Health, the Office of Behavioral and Social Sciences Research (OBSSR) convened a national working group of health professionals from multiple disciplines to answer these questions and to assist OBSSR in advancing the field of health behavior. Specifically, this group was charged with identifying barriers to the full integration of behavioral interventions in health care, devising strategies for overcoming these barriers, and issuing a final set of recommendations that can serve as a blueprint for action.

Working group members agreed that to address early and unnecessary death and disability, behavior must be acknowledged as one of the most important factors in health status and behavioral interventions must be developed and applied accordingly. What follows is a plan for achieving these goals and, ultimately, incorporating what is known about changing behavior into health care systems across the country.

The Value of Behavioral Approaches

The major health problems of our time cannot be adequately addressed without integrating the psychological, social, and behavioral aspects of health into health care. By improving quality of life and medical outcomes, preventing disease onset, and decreasing health care costs and utilization of care, behavioral approaches will help the health care system achieve its long-term goals.

Specifically, behavioral approaches:

Reduce risky behaviors/increase preventive behaviors. There are now evidence-based behavior change interventions available to address most of the behavioral risk factors for disease, including tobacco use, obesity, poor diet, sedentary life-style, and alcohol and drug addiction. And there are effective interventions that improve diet, increase participation in screening programs, and reinforce behaviors that prevent injury (e.g., reducing the number of motor vehicle accidents and the incidence of high-risk sexual behavior among HIV patients).

Treat a range of defined illnesses and conditions. Behavioral interventions have been effective in expanding the functional capacity of people with lung disorders; reversing atherosclerosis; decreasing cardiovascular disease (CVD) mortality, pregnancy complications, and sudden infant death syndrome (SIDS); and promoting self-management of diabetes, cancer, high blood pressure, asthma, psoriasis, stress, anxiety-related disorders, and conditions such as insomnia, chronic pain, irritable bowel syndrome, and headaches.

Treat proximal conditions that enhance health outcomes. Behavioral interventions, which have been shown to improve health outcomes, can help enhance an individual's sense of efficacy and coping skills; reduce the incidence of surgical complications; and prevent avoidance behaviors and irrational thinking that may delay disease diagnosis and treatment.

Enhance health care quality and reduce costs. Behavioral interventions can help change physician behavior, reduce stress-related visits to providers, and decrease client turnover. These demand-reduction benefits are increasingly important in today's market-driven health care system.

The Urgent Need for Behavioral Approaches

Several recent trends strongly suggest that it may be time for health care systems to take a closer look at evidence-based behavioral interventions and incorporate them into their service delivery protocols.

First, a myriad of efforts has been implemented in recent years to control health care costs, including managed care. Yet, health care costs have continued to rise, forcing many systems to control and, in many cases, reduce health care supply. Now, as these cost control opportunities rapidly diminish, health care systems must find ways to reduce the demand for costly procedures and treatments.

Behavioral treatments and interventions can reduce health care demand and thus, health care costs. Studies have shown that health care utilization is not necessarily related to disease frequency or severity, but often depends on patients' individual perceptions and attitudes about their symptoms. Patient suffering, for example, has driven health care demand, which has resulted in higher costs for both patients and providers. By addressing this suffering through counseling, self-care, patient education, and prevention-oriented interventions, it is possible to reduce health care utilization, length of hospital stays, and the need for more expensive and invasive treatments. Behavioral interventions can also help to lessen the burden of chronic disease, which exacts considerable economic and human costs, by changing behaviors that contribute to the progression of chronic disease and to costly complications.

Second, consumers — especially those that do not fall under the traditional, acute care medical model — are searching for new ways of maintaining and improving health and thus, are becoming increasingly more selective about which health plans they choose. In turn, consumers' desires are influencing the choices of public and private health care purchasers, who are also concerned about the human and economic costs of behaviors that contribute to disease and disability.

If market-driven health care systems are to survive, they must meet the demands of consumers and purchasers, especially the desire for high-quality services, better physician/provider-patient communication, and interventions that enable consumers to take greater control of their health. Time-tested and proven behavior change services and interventions directly respond to these needs and allow health care plans to play a central role in primary prevention to reduce health care risks.

Third, a new emphasis on accountability has forced many health care systems to reassess their health care services in terms of quality and health outcomes. Numerous studies have demonstrated the effectiveness of targeted educational, behavioral, and psychosocial

interventions in health care settings — nearly all of which are simple, safe, and relatively inexpensive ways to dramatically improve health outcomes and reduce the need for more expensive approaches.

Moreover, research on patient satisfaction has found that consumers often define quality in terms of the interpersonal nature of that care. By stressing quality over quantity, behavioral approaches not only increase the likelihood of consumers viewing more favorably the care they receive, but also foster greater job satisfaction among providers who want to offer this kind of individualized and supportive health care.

Fourth, the health care system is currently in a state of flux, offering unprecedented opportunities for innovation. New computer-based technologies, for example, have emerged to facilitate prevention and disease management strategies that have long been the hallmark of behavioral intervention. Cost-sharing arrangements that shift more payment responsibility to consumers mean that health plans will have to become even more responsive to consumers' and purchasers' interests in behavior-related services and programs. Greater consolidation of health care systems has resulted in less patient-shifting, giving plans the opportunity to strengthen the patient-provider relationship through the use of behavioral techniques. Delivering effective behavioral interventions to managed care enrollees using tailored communication methods, where they are efficient, is potentially highly cost effective. As Medicaid and Medicare enrollees increasingly are served by managed care programs, behavioral approaches can offer them readily available access to information and support that will help them better manage and prevent disease.

Barriers to and Facilitators of Integration into Health Care Delivery

What are the barriers that prevent full integration of behavioral approaches into health care systems and what are the carriers that can facilitate this process? This question was posed to working group members as well as to the medical directors of several managed care systems through a study conducted by the Center for the Advancement of Health.

Barriers to Integration

Working group members identified seven major barriers to incorporating behavioral approaches into mainstream medicine:

Lack of Standardization. The health care system demands standardized quality control and clinical information systems, evaluation criteria, program accreditation, and pricing, but most behavioral interventions are intrinsically less standardizable than medical procedures. Surgery, for example, can be performed, evaluated, priced, and assigned

administrative codes based on standard formulae. In contrast, while there are many effective interventions to change health-related behavior, few are converted into clinical practice guidelines and integrated thoroughly into standard health care practice.

Many behavioral interventions are still in the formative stages of integration with mainstream health care systems. Adding to this challenge is the perception that health behavior research is a relatively “softer” science, which means that the field must produce a greater amount of evidence than is usually the case with more procedural interventions.

Perception of High Costs. Unlike other medical interventions such as pharmaceuticals and surgery, behavioral interventions typically do not yet have powerful financial stakeholders who can encourage government and private insurance companies to cover them. While the majority of these interventions may pay for themselves over the long-term, insurers tend to be primarily interested in evidence of short-term cost-effectiveness, based on their awareness that consumers often switch plans before any long-term savings can be realized.

Lack of Knowledge and Awareness. A knowledge gap exists at several levels between what health behavior research can do to help the health care system achieve its goals, and how much is known about these interventions. At the consumer level, patients are often unaware of behavioral approaches and fail to demand them from their health care plans. Health care providers continue to view pharmaceutical, diagnostic, and/or surgical interventions as easier, quicker, and more effective than behavioral procedures, or they do not expect or trust patients to comply with behavioral recommendations. At the organizational level, health care plans have resisted integrating them fully into their service regimen because they remain unconvinced of their effectiveness.

The bulk of health care research—and, by extension, research funding—continues to be focused largely on traditional medical models and/or interventions, rather than on behavioral or combined biomedical/behavioral approaches. Moreover, multicultural approaches to research (e.g., identifying the best health care strategies to use cross-culturally), have yet to be fully adapted for use in behavioral research.

Organizational Barriers. Health care plans that acknowledge the value of behavioral approaches still face considerable hurdles when trying to integrate them into service delivery. The current acute care-oriented health care system is not staffed or organized to deliver the planned, supportive care required for behavioral prevention and disease management. In addition to lacking trained and credentialed staff (e.g., nutritionists, psychologists, occupational therapists, etc.) that can provide high quality behavioral care,

many health care plans simply have not established payment/reimbursement systems or policies for covering behavioral treatments.

Finally, assessing or evaluating the behavioral treatments offered through health plans is often difficult because stringent practice guidelines have yet to be established. To some plans, for example, “patient education” means simply giving patients a pamphlet, while others include a broader range of educational services (e.g., counseling, biofeedback, etc.) under this rubric.

Lack of Clear Identity. The health behavior research field continues to struggle with a lack of clarity as to its goals, parameters, and interests. Specifically, it has yet to adequately define what makes it effective and what distinguishes it from other models, including those that have been readily embraced by the health care profession, as well as the public at large.

Gaps in Evidence Base. In a number of areas, the health behavior field has yet to gather sufficient empirical evidence that will support fully the efficacy of many of its interventions and claims, as well as justify the establishment of policies and processes to identify, train, and credential a wide range of health and mental health professionals.

Few Dissemination Vehicles. There is a dearth of dissemination vehicles for getting the data that does exist into the hands of multidisciplinary professionals quickly and efficiently. Currently, there are few centralized information and dissemination sources, crippling the ability of those in the field to advocate for these approaches in a more concerted, strategic way. Further, dissemination efforts have relied on passive, rather than active, strategies (e.g., guidelines). As a result, implementation of behavioral interventions continues to be scattershot, leaving those in the field and outside it unaware of current research, issues, and/or trends.

Facilitators of Integration

Strategies that can overcome these barriers include:

Obtaining better evidence. With more scientific evidence to substantiate the need for behavioral interventions and their effectiveness, health care systems will have more incentive to incorporate them into their plans.

Improving standardization. Quality standards, practice guidelines, decision models, and cost-effective analyses will provide legitimacy and also help improve services. Categories that describe treatments (e.g., short-, medium-, or long-term interventions and group- or individual-focused interventions, etc.) must also be developed.

Better practice models and training approaches. Practitioners, researchers, and proponents need to be more proactive in developing and reporting on model programs that can inspire and guide others to develop effective and cost-efficient behavioral health programs. In addition, the field must offer better training for those who deliver behavioral services, which will not only impart a standardized set of skills to professionals but will also legitimize and motivate the profession at large.

Mobilizing public support. Although studies show that consumers have readily embraced the notion of “alternative medicine,” the public does not appear to include behavioral approaches to improving health and preventing and managing disease. It is not clear whether this is because they do not understand evidence-based behavioral approaches — what they are and how they work — or because the public resists the notion that improved health might involve working to change habits when some less laborious herb or manipulation might have the same effect.

The definition, purpose, and outcomes of behavioral approaches must be clearly defined in language that is useful to decisionmakers and the public. Strategic educational and marketing efforts should be targeted toward consumers, policymakers, and others with the power to champion behavioral interventions. Messages must be developed that emphasize behavioral effectiveness of the interventions and their ability to improve health outcomes, expand patients’ choices, and enhance quality of life.

Clear framing of the role of interventions. If behavioral interventions are to be accepted more fully, practitioners and researchers must talk about them differently than they have in the past. Specifically, the role of behavioral interventions is neither clear nor vital within a traditional medical model, in which the primary goal is to offer a “cure” for an existing disease. However, in a risk management model of health care, in which the goal is to prevent disease and reduce risk factors for multiple disease, such interventions become key.

The View of Providers

What do managed care representatives perceive as barriers or carriers to the integration of behavioral approaches into health care systems? Preliminary data from a survey¹ conducted by the Center for the Advancement of Health (CAH) reveals that there is some agreement among health care providers, researchers, and clinicians as to barriers and carriers, but there is also some disagreement.

The Center surveyed HMO medical directors licensed in five states (Oregon, Wisconsin, Massachusetts, Colorado, and Florida, and the District of Columbia) about the behavior change programs their plans provided, their views of the scientific evidence supporting behavior change interventions, factors that influence the provision of behavior change programs in their plans, and the sources of evidence-based information they use to support their choices. Fifty (50) of 110 HMO medical directors responded to the survey (a relatively high response rate of 46 percent), which defined “behavior change programs” as activities that help members modify their behavior to prevent or manage a health condition.

Participants were asked whether they provided any of the following programs to HMO enrollees: exercise/fitness, nutrition education, smoking cessation, and alcohol and other drug dependency programs. Respondents were also asked whether they provided behavioral interventions as treatment for several conditions that have proven to respond positively to behavioral approaches: asthma, depression, diabetes, pregnancy, back pain, and cardiovascular conditions.

Of the 50 medical directors surveyed, a considerable percentage reported offering alcohol/drug dependency (92 percent) and smoking cessation (76 percent) programs, and slightly less said they provide nutrition education (66 percent) and exercise/fitness regimens (30 percent). Nine out of 10 HMOs reportedly offer behavioral change programs for diabetes, 86 percent for asthma, 80 percent for both pregnancy and cardiovascular conditions, and 76 percent for depression. Only about a quarter of HMOs offer such interventions for back pain (26 percent). Although 98 percent of HMOs say that the scientific evidence now available is sufficient to support the behavior change programs offered, less than half indicate that such evidence is “most important” to their decision to offer these programs.

According to HMO medical directors, barriers to incorporating behavior change programs include concerns about the lack of trained staff people and uneven quality of available

¹ The Robert Wood Johnson Foundation funded “Changing Health-Related Behavior in Managed Care Settings,” a program of the Center for the Advancement of Health.

vendors/services; the perception that these programs are either too costly or cost-ineffective; and the difficulty of measuring health outcomes when they are used. Administratively, respondents said that these interventions were still not yet part of their organizational culture, which continues to favor an acute-care model. Organizational structure is also a barrier; specifically, institutions are not designed to facilitate the kind of patient-provider contact and communication they associate with behavioral interventions. Other identified barriers were financial systems (payment and reimbursement), regulatory issues (state versus local regulations), and consumer access to and location of these services.

At the provider level, a major barrier to the full integration of health behavior research into managed care was the acute care or biomedical treatment orientation of physicians and other providers, as well as providers' negative attitudes toward patient adherence to a behavioral regimen. Confidentiality breaches were also perceived as a barrier.

Further, medical directors stressed that behavioral approaches were not in high demand from consumers/members and purchasers, so they did not feel required to offer them. High member turnover rates (12-30 percent) and difficulties involved in documenting the long-term success of behavioral interventions were also perceived as barriers to integration.

Factors the medical directors said were most important to their decisions to offer behavior change programs fell into two categories: administrative, such as organizational culture and image, and program/intervention, such as quality, cost and outcome evaluation. Plans stressed that incorporating these programs not only "helps to improve the plan's image," but increasingly is required by quality assurance agencies such as the National Committee for Quality Assurance (NCQA). At the program level, HMOs perceive the behavioral interventions as an opportunity to improve quality of life, reduce the use of medical services, improve health outcomes, and increase treatment compliance.

Strategies for Change

A model for translating evidence-based health and behavior research into practice² serves as a useful heuristic through which to organize the recommendations of the OBSSR Working Group.

The model posits three dynamic and interacting kinds of activities that will increase the number of systems and providers of evidence-based behavioral interventions and the

² The model was developed by Jessie Gruman, Center for the Advancement of Health; Tracy Orleans, the Robert Wood Johnson Foundation; and Norman Anderson, Office of Behavioral and Social Sciences Research, NIH. It was presented at the Society of Behavioral Medicine annual meeting in March, 1999.

number of individuals receiving them, with the ultimate aim of improving population health and well-being. The three types of activities are:

Technology Push: Proving or improving interventions for population-wide use. This activity includes the development of standards for defining effectiveness, the development of formal clinical practice guidelines, and testing/adapting interventions in underserved and high-risk populations and settings.

Research and Clinical Capacity: Building the capacity of relevant systems to produce stronger and more precise evidence and to deliver interventions. This activity includes providing technical assistance for the delivery of evidence-based interventions in real world settings, provider training, and clinical improvement/quality control standards and packaging interventions to make the best possible use of available technologies.

Market Pull/Demand: Building a market and demand for interventions, including direct-to-consumer marketing; increasing market demand through cost-effectiveness research; and implementing policies that drive demand and implementation, such as Healthplan Employer Data and Information Set (HEDIS) quality measures.

It is only through a level of simultaneous strategic activity in each of these domains that we will realize the promise of behavioral approaches to the prevention and treatment of disease.

The same model can be used to describe the types of actions needed to strengthen practice-oriented research. The OBSSR Working Group recommended the following actions:

Technology Push

I. Increase Practice-Oriented Research (POR)

Make use of all available research-related resources to increase the amount of high quality interdisciplinary research:

- Seek out and utilize non-RO1 research funding mechanisms (e.g., Small Business Innovation Research, minority supplement, quality of life supplement, etc.).
- Make use of non-Federal research funds to support pilot interventions and intervention evaluations.

- Increase the use of Agency for Health Care Policy and Research grant mechanisms to produce cost-effectiveness/cost benefit research.
- Get end-users involved early as stakeholders and partners in the design of interventions to be tested.

II. Improve Research Funding for POR

Increase commitment and action by funding organizations to increasing knowledge and practice based on an expanded view of health:

- Communicate with NIH institute directors and program officers about the potential of evidence-based behavioral interventions to help their public constituencies.
- Work to ensure that training and research funding mechanisms clearly include behavioral and social scientists.

III. Strengthen Intervention Presentation and Availability

Summarize, organize, and make widely available comprehensive evidence-based interventions:

- Standardize behavioral interventions for health promotion and disease prevention and management. Make those standards widely available to clinicians, training programs, health plans, and the public.
- Develop formal clinical practice guidelines.
- Test/adopt interventions in new populations and settings.
- Translate the evidence base of behavioral interventions into language that is useful for policy makers, health care decisionmakers, and consumers.

Research and Clinical Capacity

IV. Improve Clinical Capacity

Develop and implement strategic approaches to communicate essential research findings to those who will implement them on a day-to-day basis:

- Train clinicians (biomedical and behavioral) to deliver evidence-based interventions in clinical settings.
- Provide technical assistance to health plans and other health care delivery institutions to ensure access to and implementation of evidence-based interventions and practices.

V. Improve Training in POR and Evidence-Based Practice

Maximize use of available training resources to increase the number of capable researchers working on mechanisms and intervention:

- Build electronic and other vehicles to link behavior change clinicians and provide them with easy access to experienced clinicians and emerging evidence about effective treatment.
- Identify, publicize, and utilize NIH training resources.
- Develop a network of those receiving NIH training resources in which at least part of those funds are used for intervention development and communication about common concerns, core competencies, etc.

VI. Develop Credentialing and Certification

Improve the ability of clinicians working to change health-related behavior to define and deliver high quality effective services:

- Define core competencies, training requirements, and professional standards for the delivery of behavioral interventions. This will involve issues of licensing, certification, and accreditation.

Market Pull/Demand

VII. Increase the Demand for Evidence-Based Behavioral Interventions

Increase the demand for evidence-based biobehavioral services among individual clinicians, health care decisionmakers, policymakers in the Federal, State, and local government, as well as the general public:

- Summarize cost-effectiveness information about standardized behavioral approaches and make them available to health care leaders.
- Ensure that evidence-based behavioral interventions are included as part of NCQA and Joint Commission on Accreditation of Healthcare Organizations (JCAHO) accreditation for health care delivery, NCQA performance indicators, and other quality measurement strategies.
- Develop strategies for keeping interventions to change health-related behavior in public view.

VIII. Encourage Business Development

Learn from successful ventures to market health behavior change interventions:

- Convene those active in business applications of behavioral approaches to disease prevention, treatment, and management. Identify action steps and disseminate lessons learned.

IX. Improve Stakeholder Knowledge

Increase the visibility and utility of the science base among policymakers, health care decisionmakers, clinicians, the biomedical research community, and the general public:

- Improve the ability of behavioral researchers and clinicians to share information, learn across disciplines and fields, and advocate for increased resources.
- Publish and present reviews and meta-analyses of interventions in nonbehavior/social science journals and venues.

X. Monitor Use of Evidence-Based Behavioral Interventions in Health Care

Establish means of monitoring needs and trends among the decisionmakers and practitioners and communicate this information to the research, funding, and quality assurance communities:

- Monitor attitudes, practices, and needs of managed care decisionmakers, health care purchasers, clinicians, and consumers to discover how behavioral approaches are viewed and used. Use this information to shape an ongoing strategy to advance evidence-based behavioral approaches.

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